TRUMPETER SWAN RESTORATION

Prior to the settlement of Iowa, trumpeter swans nested throughout the state. However, wetland drainage and unregulated hunting of trumpeters soon brought their demise. Prior to 1998, the last wild nesting trumpeter swan in Iowa occurred in 1883 on the Twin Lakes Wildlife Area southwest of Belmond, Iowa in Hancock County. In 1998, three cygnets hatched from a wild nesting trumpeter pair in Dubuque County. This pair hatched 5 in 1999, 5 again in 2000, 4 in 2001, and 5 in 2002.

In 2000, a second pair nested on a Winnebago County Conservation Board wetland (Russ Tract at Thorpe Park) 7 miles west of Forest City. This pair had 5 eggs. Unfortunately none hatched. We did, however, add a sixth egg and it hatched providing this pair with a young cygnet to help bond the pair to the wetland nest site.

Trumpeter swans were first given nationwide protection in 1918 when the United States, Canada, and Mexico signed the International Migratory Bird Treaty. A nationwide swan count in the early 1930s showed that only 69 existed in the continental United States with all those occurring in Red Rock Lakes National Wildlife Refuge in southwest Montana.

In 1993 the Iowa Department of Natural Resources developed a plan to restore trumpeter swans to the state. Our goals are to: (1) establish 15 wild nesting pairs to the state by the year 2003 and (2) use the swans to promote the many values of wetlands not only for wildlife habitat but for water quality and flood reduction.

Iowa swans are being obtained from zoos, private propagators, other state swan projects, and any other sources that might have swans available. Figure 12.1 shows the 25 states from which we have obtained trumpeter swans. We are also establishing flightless breeder pairs at appropriate sites, the young of which will be allowed free flight. Fifty-five partnership breeding pair sites are established. All trumpeter swans released in Iowa will be marked with plastic green or red neck collars and leg bands, as well as, U.S. Fish and Wildlife Service bands. The plastic neck and leg bands are marked with alpha letters F, H, P, J, C, T, and numbers 00 through 99.

We are trying to obtain as much outside funding as possible and we are the fortunate recipients of $165,000 in memory of David A. and Robert Luglan Sampson, formerly of Webster City. Numerous individuals, organizations, and corporations have contributed significant smaller dollar amounts. Considerable soft match in-kind contributions have also been made and are estimated at over $350,000.

Table 12.1 and Fig 12.2 show the trumpeter swans released and release sites in Iowa since 1994. After five years of migration observations, most migrating Iowa swans that migrate are wintering in northeast and east central Kansas and northwest and west-central Missouri. One Iowa trumpeter swan did winter as far south as Oklahoma during the winter of 1998-99. Also, one swan wintered near Heber Springs, Arkansas in 1999-2000. In 2001, the swans that nested at Union Slough NWR and Mallard Marsh wintered in southwest Arkansas. The mild winter of 2001-2002 indicated that swans did not need

to move as far south as they had in normal winter conditions. A record 25 free flying trumpeter swans from Iowa, Minnesota, and Wisconsin wintered near Woolstock, Iowa. If swans can find open water many of them will remain throughout the state of Iowa. Figure 12.3 shows what appears to be the beginning of "traditional" swan wintering sites in Iowa.

Migration movements "out of that norm" included 3 swans released at Union Slough NWR that migrated to and wintered in southeast Colorado near Ft Lyon. Two of these were observed at Monticello, Minnesota in the spring of 1997. The straight-line round trip mileage for these birds is over 1300 miles.

A review of the last 7 years of swan sightings indicates, most areas of state are now seeing swans at sometime during the year. This is another indication that the restoration effort, although slow, is moving forward. During 2002, 33 of our partnership pairs produced a record 141 young. Four additional nests failed to hatch and 3 to 4 dozen of the 141 cygnets have died of various causes. The invasion of West Nile Virus into Iowa has us cautiously concerned, but at this point we have not seen any impact of this virus in trumpeter swans. Unless we have unfortunate luck, we should be able to release nearly 90 swans during the spring of 2003. The DNR is excited about what the future holds for trumpeter swan in the state.

Known mortality to date includes the following: 19 have died in power line collisions, 31 were shot, 5 died of apparent malnutrition, and 17 died of unknown causes. Several other mortalities have likely occurred from completely unknown causes as we have not had many mortality reports from unmarked swans. Mortality rates are somewhat higher than anticipated and will likely slow our trumpeter swan restoration efforts. Iowa currently has the dubious distinction of having the highest shooting mortality of any state in the Midwest. We hope that with enough publicity, on the swan poaching in Iowa and with additional enforcement efforts and public scrutiny, we will see the illegal shooting greatly reduced. Shooting trumpeter swans will cost $1500 in liquidated damages, court costs, and perhaps hunting license revocation.

A major milestone was reached in 1998, 1999, and again in 2000, when the first and second free-flying trumpeters nested in Iowa since 1883. Four free flying females have bonded and mated with 5 captive/pinioned males and have produced eggs. Besides these, we apparently have several pairs of Iowa swans nesting in Southern Minnesota and Wisconsin. The one near Mankato, MN and the one near Potosi, WI are the southern most nesting swans in the respective states. At least one Iowa bird, a male, was part of a nesting pair on the north shore of Lake Ontario. In 2001, 9 trumpeter swan nest attempts occurred in Iowa. Six of these hatched and produced 19 young. Figure 12.3. Seventeen of these were surviving as of September 1, 2001. High mortality of adults from illegal shootings had us greatly concerned that we would not have very many wild nesting swans in the spring of 2002. We have, however, had 8 trumpeter swans nest attempts in 2002 and an additional 2 Iowa pairs successfully nested on the Wisconsin side of the Mississippi River producing a record 39 young in the wild. Figure 12.3. Twenty-eight of these were

surviving as of September 1. Since 1998, twenty-three trumpeter swan nests have occurred in Iowa, 19 of which at least hatched at least one egg.

Table 12.1. Trumpeter swans released in Iowa, 1994 - present.

Site	Year	Area	County	Males	Females	Total
1	1994	Ventura Marsh	Cerro Gordo	Unk.	Unk.	4
2	1995	Kettleson's WPA	Dickinson	5	5	10
3		Jim Foreman's	Dubuque	2	2	4
2	1996	Kettleson's WPA	Dickinson	7	4	11
4		Union Slough NWR	Kossuth	5	5	10
5		Spencer	Clay	3	1	4
6		Anderson Lake	Hamilton	2	2	4
7		Harold Brun's	Lee	0	2	2
1	1997	Ventura Marsh	Cerro Gordo	3	6	9
2		Kettleson's WPA	Dickinson	3	5	8
8		Lost Island Marsh	Palo Alto	4	4	8
9		Eagle Lake	Hancock	4	4	8
10		Goose Lake	Greene	1	1	2
2	1998	Kettleson's WPA	Kossuth	5	3	8
4		Union Slough	Kossuth	5	5	10
5		Spencer	Clay	1	2	3
6		Anderson Lake	Hamilton	3	3	6
11		Bill Colwell	Black Hawk	1	3	4
12		Goose Lake	Clinton	1	5	6
13		Bjorkboda Marsh	Hamilton	1	1	2
14		Cheever Lake	Emmet	4	4	8
15		Cone Marsh	Louisa	3	3	6
16		Don Holzer	Dubuque	2	1	3
17		Jim Foreman	Dubuque	0	1	1
2	1999	Kettleson's WPA	Dickinson	3	3	6
4		Union Slough NWR	Kossuth	2	2	4
18		Green Island	Jackson	3	3	6
19		Henry Bohlen	Des Moines	1	1	2
20		Union Hills	Cerro Gordo	3	3	6
21		Myre Slough	Winnebago	3	3	6
22		East Twin Lake	Hancock	3	3	6
23		Mallard Marsh	Cerro Gordo	3	3	6
2	2000	Kettleson's WPA	Dickinson	6	6	12
4		Union Slough NWR	Kossuth	2	4	6
11		Bill Colwell	Black Hawk	3	7	10
12		Goose Lake	Clinton	2	4	6
14		Cheever Lake	Emmet	2	4	6
16		Don Holzer	Dubuque	2	1	3
23		Mallard Marsh	Cerro Gordo	1	1	2
24		Cherokee County	Cherokee	2	1	3
25		Little Storm Lake	Buena Vista	1	1	2
26		Four Mile WPA	Emmet	2	4	6
27		Joice Slough	Worth	3	3	6
28		Lake Sugema	Van Buren	5	2	7
29		Muskrat Slough	Jones	3	3	6
30		Pickeral Lake	Clay	4	3	7
31		Pin Oak Bottoms	Lucas	1	1	2
32		Rock Creek	Clinton	3	3	6
33		Thorpe Park	Winnebago	1	0	1

Site	Year	Area	County	Males	Females	Total
2	2001	Kettleson's WPA	Dickinson	5	3	8

11		Bill Colwell	Black Hawk	2	2	4
13		Bjorkboda Marsh	Hamilton	1	1	2
15		Cone Marsh	Louisa	2	2	4
20		Union Hills	Cerro Gordo	3	3	6
24		Cherokee County	Cherokee	1	2	3
30		Pickeral Lake	Clay	2	2	4
31		Pin Oak Bottoms	Lucas	1	1	2
33		Thorpe Park	Winnebago	1	1	2
34		Big Wall Lake	Wright	4	1	5
35		Dick Block	Clinton	1	1	2
36		Blue Wing Marsh	Palo Alto	4	2	6
37		Colyn Marsh	Lucas	2	2	4
38	`	Crawford Creek	Ida	2	2	4
39		Dunbar Slough	Greene	1	0	1
40		East Slough	Emmet	5	1	6
41		Killen Wetland	Steele, MN	1	1	2
42		Kiowa Marsh	Sac	3	1	4
43		Lake Wapello	Davis	1	1	2
44		Kirby Roberts	Calhoun	1	2	3
45		Princeton WMA	Scott	3	4	7
46		Buena Vista WMA	Scott	1	1	2
47	2002	Amana Forestry	Iowa	3	1	4
48		Atlantic Quarry	Cass	1	4	5
49		Big Mill Pond WMA	Jackson	1	1	2
50		Center Lake	Dickinson	1	1	2
51		Clark Lake	Cerro Gordo	1	1	2
52		Virgil Cole's WRP	Van Buren	2	2	4
40		East Slough WMA	Emmet	2	2	4
53		Elmer Kettleson	Clinton	0	2	2
2		Kettleson's WPA	Dickinson	3	3	6
54		Hurstville Marsh	Jackson	1	1	2
17		Duane Kennedy	Dubuque	1	1	2
43		Lake Wapello	Davis	1	1	2
55		Lizard Lake	Pocahontas	1	1	2
23		Mallard Marsh	Cerro Gordo	1	1	2
56		New Hartford	Butler	1	0	1
57		Ralph Steines Marsh	Clinton	1	1	2
32		Rock Creek Park	Clinton	0	1	1
58		Smith Slough	Clay	2	2	4
59		South Twin Lake	Calhoun	3	2	5
33		Thorp Recreation Area	Winnebago	1	1	2
60		Richard Baack Wetland	Cerro Gordo	1	1	2
4		Union Slough NWR	Kossuth	2	2	4
1		Ventura Marsh	Cerro Gordo	1	1	2
61		White's Pond	Clinton	2	0	2
					Grand Total	**423**

The 1994 Ventura Marsh swans escaped captivity.

Figure 12.1. Trumpeter swan release sites, 1994 - present. Numbers are referenced in Table 12.1.

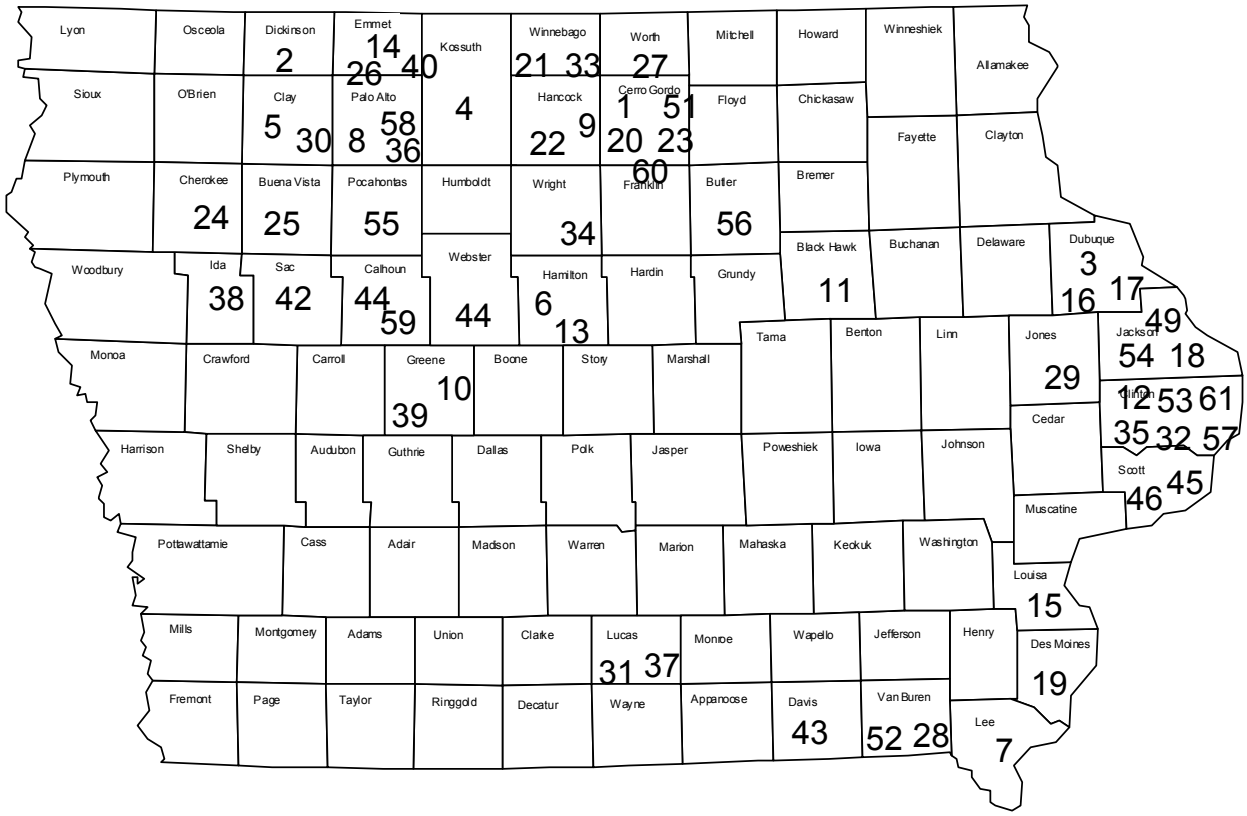
Lyon
Osceola
Dickinson
2
Emmet
14
26
40
Kossuth
4
Winnebago
21
33
Worth
27
Mitchell
Howard
Winneshiek
Allamakee
Sioux
O'Brien
Clay
5
30
Palo Alto
8
58
36
Hancock
22
9
Cerro Gordo
1
51
20
23
60
Floyd
Chickasaw
Fayette
Clayton
Plymouth
Cherokee
24
Buena Vista
25
Pocahontas
55
Humboldt
Wright
34
Franklin
Butler
56
Bremer
Buchanan
Delaware
Dubuque
3
16
17
49
Woodbury
Ida
38
Sac
42
Calhoun
44
59
Webster
44
Hamilton
6
13
Hardin
Grundy
Black Hawk
11
Jackson
54
18
Monoa
Crawford
Carroll
Greene
10
39
Boone
Story
Marshall
Tama
Benton
Linn
Jones
29
Clinton
12
53
61
Cedar
35
32
57
Harrison
Shelby
Audubon
Guthrie
Dallas
Polk
Jasper
Poweshiek
Iowa
Johnson
Scott
45
46
Muscatine
Pottawattamie
Cass
Adair
Madison
Warren
Marion
Mahaska
Keckuk
Washington
Louisa
15
Mills
Montgomery
Adams
Union
Clarke
Lucas
31
37
Monroe
Wapello
Jefferson
Henry
Des Moines
19
Fremont
Page
Taylor
Ringgold
Decatur
Wayne
Apparoose
Davis
43
Van Buren
52
28
Lee
7

Figure 12.3 Wild Trumpeter Swan Nest Attempts (2001 & 2002).